Application No.: 10/535,168 2 Docket No.: 223002109500

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

Claim 1 (Withdrawn-Currently Amended) A composition comprising: (a) outer-membrane vesicles prepared from a first strain of Neisseria meningitidis; and (b) an isolated or recombinant NMB1799 protein one or more proteins which are present in outer-membrane vesicles prepared from a second-strain of Neisseria meningitidis, but which are not present in outer-membrane vesicles prepared from said first strain.

Claim 2 (Withdrawn-Currently Amended) The composition of claim 1, wherein the protein[[(s)]] of component (b) is [[are]]: (i) purified from the second strain and added to component (a); (ii) expressed recombinantly, purified, and added to component (a); or (iii) expressed by said first strain following either engineering of the first strain such that it expresses said protein[[(s)]], either (1) from [[its]] the first strain's chromosomal DNA or from extrachromosomal DNA, or (2) such that existing expression of said protein[[(s)]] is up-regulated, or (3) such that trafficking of said protein(s) already expressed by the first strain is altered to direct it/them to a different cellular location, thereby causing it/them to be present in the outer membrane vesicles.

Claim 3 (Withdrawn) A composition according to claim 1, comprising outer-membrane vesicles (OMVs) prepared from a genetically-modified first strain of *Neisseria meningitidis*, wherein said OMVs include one or more proteins which are (a) not present in OMVs prepared from said first strain prior to its being genetically modified, but which are (b) present in OMVs prepared from a second strain of *Neisseria meningitidis*.

Claim 4 (Withdrawn) The composition of claim 3, wherein the one or more protein(s) are selected from the following proteins disclosed by Tettelin *et al.* [Science (2000) 287:1809-1815] and deposited in the sequence databases as: NMB0007, NMB0018, NMB0031, NMB0035, NMB0051, NMB0052, NMB0088, NMB0089, NMB0109, NMB0110, NMB0124, NMB0126,

NMB0130, NMB0132, NMB0138, NMB0139, NMB0143, NMB0154, NMB0157, NMB0168, NMB0171, NMB0182, NMB0204, NMB0214, NMB0219, NMB0280, NMB0313, NMB0336, NMB0359, NMB0375, NMB0382, NMB0387, NMB0410, NMB0423, NMB0426, NMB0427, NMB0461, NMB0462, NMB0477, NMB0546, NMB0554, NMB0586, NMB0595, NMB0604, NMB0610, NMB0617, NMB0618, NMB0623, NMB0626, NMB0631, NMB0634, NMB0638, NMB0652, NMB0663, NMB0703, NMB0757, NMB0758, NMB0763, NMB0787, NMB0854. NMB0875, NMB0876, NMB0889, NMB0920, NMB0943, NMB0944, NMB0946, NMB0954, NMB0955, NMB0957, NMB0959, NMB0983, NMB1011, NMB1046, NMB1053, NMB1055, NMB1124, NMB1126, NMB1127, NMB1131, NMB1153, NMB1162, NMB1164, NMB1165, NMB1191, NMB1199, NMB1201, NMB1228, NMB1240, NMB1252, NMB1285, NMB1301, NMB1313, NMB1323, NMB1332, NMB1339, NMB1341, NMB1342, NMB1358, NMB1392, NMB1429, NMB1437, NMB1445, NMB1457, NMB1460, NMB1497, NMB1506, NMB1518, NMB1533, NMB1540, NMB1554, NMB1567, NMB1572, NMB1574, NMB1576, NMB1577. NMB1594, NMB1612, NMB1642, NMB1668, NMB1684, NMB1710, NMB1714, NMB1762, NMB1796, NMB1799, NMB1808, NMB1812, NMB1849, NMB1854, NMB1855, NMB1861, NMB1869, NMB1874, NMB1903, NMB1921, NMB1934, NMB1936, NMB1946, NMB1949, NMB1953, NMB1969, NMB1972, NMB1988, NMB1998, NMB2039, NMB2069, NMB2086, NMB2096, NMB2101, NMB2102, NMB2103, NMB2129, NMB2134, NMB2138, NMB2154 and NMR2159

Claim 5 (Withdrawn) The composition of claim 4, wherein the one or more proteins are selected from: NMB0182, NMB0382, NMB0634, NMB0763, NMB1126, NMB1342, NMB1429, NMB1799 and: NMB2039.

Claim 6 (Withdrawn-Currently Amended) A lipid bilayer which includes a protein selected from: (i) a protein comprising the [[an]] amino acid sequence selected from the group consisting of SEQ ID NO: 207 NOs: 1 to 217; (ii) a protein comprising an amino acid sequence which shares at least [[50%]] 90% sequence identity with the [[an]] amino acid sequence selected from the group consisting of SEQ ID NO: 207 NOs: 1 to 217; (iii) a protein comprising a fragment of the [[an]] amino acid sequence selected from the group consisting of SEQ ID NO: 207 NOs: 1 to 217, wherein

the fragment comprises at least [[7]]  $\underline{12}$  consecutive amino acids from the sequence; and/or (iv) a hybrid protein of formula:  $NH_2$ -A-[-X-L-]<sub>n</sub>-B-COOH, wherein X is the amino acid sequence as defined in any one of (i) to (iii), L is an optional linker amino acid sequence, A is an optional N-terminal amino acid sequence, B is an optional C-terminal amino acid sequence, and n is an integer greater than 1.

Claim 7 (Withdrawn) The lipid bilayer of claim 6, in the form of a cell membrane, a liposome, a bacterial ghost, an outer membrane vesicle or a bleb.

Claim 8 (Withdrawn) The lipid bilayer of claim 6 or claim 7, which does not include at least one of the following native membrane components: a porin; lipooligosaccharide; lipopolysaccharide; PilC protein; Omp85 protein; an opacity protein[[s]]; a pilin; or P64k.

Claim 9 (Currently Amended) A protein comprising An immunogenic composition comprising an isolated or recombinant polypeptide comprising (a) at least 12 consecutive amino acids from SEQ ID NO; 207, or (b) an amino acid sequence selected from the group consisting of that shares at least 90% sequence identity with SEQ ID NO; 207, NOs: 1 to 217 and an adjuvant.

Claim 10 (Currently Amended) A protein comprising The immunogenic composition of claim 9 wherein the polypeptide comprises an amino acid sequence which shares at least [[50%]] 95% sequence identity with an amino acid sequence selected from the group consisting of SEQ ID NO: 207 NOs: 1 to 217.

Claim 11 (Currently Amended) A protein comprising The immunogenic composition of claim 9 wherein the polypeptide a fragment of an amino acid sequence selected from the group consisting of SEQ ID NOs: 1 to 217, wherein the fragment comprises at least [[7]] 12 consecutive amino acids from SEQ ID NO: 207 the sequence.

Claim 12 (Currently Amended) [[A]] The immunogenic composition of claim 9 wherein the polypeptide comprises a hybrid protein of formula: NH<sub>2</sub>-A-[-X-L-]<sub>a</sub>-B-COOH, wherein X is the amino acid sequence comprising (i) at least 12 consecutive amino acids from SEO ID NO: 207, or

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(b) an amino acid sequence that shares at least 90% sequence identity with SEQ ID NO: 207 as defined in any one of claims 1 to 3, L is an optional linker amino acid sequence, A is an optional N-terminal amino acid sequence, B is an optional C-terminal amino acid sequence, and n is an integer greater than 1.

Claim 13 (Currently Amended)  $\underline{A}$  Nucleic acid encoding the <u>polypeptide protein</u> of any one of claims 9 to 12.